

REMARKS

This responds to the Office Action mailed on September 30, 2005, and the references cited therewith.

No claims are amended, added or canceled. Claims 9-14 and 40-52 remain pending in this application.

Double Patenting Rejection

Claims 9-12, 41 and 43 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 and 8-11 of co-pending Application No. 10/643,567.

Claims 9-14 and 40-52 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-46 of U.S. Patent No. 6,607,599.

Claims 9-12, 14 and 40-52 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,641,669.

Claims 9-14 and 40-52 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-77 of U.S. Patent No. 6,669,781.

A Terminal Disclaimer in compliance with 37 C.F.R. 1.321(b)(iv) will be promptly submitted once the Patent Office acknowledges the presence of patentable subject matter and the scope of the allowable claims is finalized. Applicants submit that it is premature to require submission of a Terminal Disclaimer when all the claims are under prior art based rejections.

§102 and 103 Rejections of the Claims

1. Claims 46-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent No. 59-76868 (hereinafter "the Japanese Patent"). Applicants respectfully traverse the rejection for the reasons stated below.

Applicants respectfully traverse the single reference rejection under 35 U.S.C. 103 since each and every one of the recited elements of the rejected claims 46-49 cannot be found in the Japanese Patent. From the context of the Office action, it is clear that Official Notice is being taken of the missing elements. Applicants respectfully traverse the taking of Official Notice and, pursuant to M.P.E.P. 2144.03, Applicants request the Examiner to cite references in support of the elements for which Official Notice was taken, as discussed below.

The Japanese Patent is the sole patent cited in support of the obviousness rejection of claims 48-49. For example, it is conceded in the Office Action the Japanese Patent “..fails to teach that (the) sheet of material is constructed from stainless steel¹” as claims 46-49 require².

The Office Action cites *In re Leshin*, 125 USPQ 416 (CCPA 1960) in support of a contention³ that it would have been obvious at the time that the invention was made to construct the sheet of material in the Japanese patent from stainless steel. Applicants point out that in *In re Leshin*, the Appellant contended that the cited reference did not show “applicant’s molded plastic materials” despite the fact that the claim in question in that case did not even specify the material from which the claimed container was made. Contrary to the factual situation in *In re Leshin*, in the present case, Applicant specifies that the material is stainless steel and the claims additionally require “a coating ... to retard spreading of the printable adhesive.” Because claim 46 calls for stainless steel body and a coating to retard spreading of printable adhesive, the Office Action must have relied upon personal knowledge of the Examiner or other evidence in alleging⁴ that use of stainless steel as the material in claim 40 was obvious.

Applicants also note that the Japanese patent does not show or suggest the use of the mask with a “printable adhesive” as required in claims 45-49, it merely indicates that it is “used in the formation of thin films on prescribed parts by spraying fine powder of metal, ceramics or the like.” Clearly a fine powder of metal or ceramic would not present the same spreading problems as the claimed printable adhesive.

¹ Office Action of September 30, 2005, page 8 lines 10-11.

² Claim 46 requires “...a stainless steel sheet which is impervious to a printable adhesive applied thereto..”

³ Office Action of September 30, 2005

⁴ “...it would have been obvious to one having ordinary skill in the art at the time that the invention was made to construct the stencil base 1 from stainless steel since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.”

Nor does the Japanese patent show or suggest that the "layer of polytetrafluoroethylene resin" is used for any other purpose than assuring that, as stated in the Japanese patent, "no sprayed material deposits on the mask A." Claim 46 clearly states that the applied coating. "is to retard spreading of the printable adhesive material onto the at least one top or one bottom surface of the sheet."

Finally, Applicants also observe that FIG. 2 of the Japanese patent shows two distinct layers 2a and 2b rather than "a coating" as called for in claim 46.

In view of the above it is clear that the Japanese patent lacks many of the features called for in claims 46-49. The Office Action fails to set forth a *prima facie* showing of anticipation of claims 46-49. Reconsideration and allowance of those claims is requested.

2. Claims 9-13, 41, 43 and 46-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent No. 59-76868 in view of Hefele (U.S. 5,460,316). Applicants respectfully traverse the rejection for the reasons stated below.

In the previous section Applicants explained what elements of claims 46-49 were missing in the Japanese patent. The Office Action, apparently conceding the difficulties of applying the Japanese patent in a single reference obviousness rejection, now combines it here with Hefele. Applicants suggests that the rejection does not meet the requirements of providing evidence showing a motivation to combine multiple references as well as evidence of success if the teachings are combined. Applicants will explain in more detail below that the deficiencies of the Japanese patent as a reference are not remedied by Hefele if combined with the Japanese patent as the Office Action proposes.

Those deficiencies in applying the Japanese patent as a reference are also true with regard to the application of that patent to claims 9-13, 41 and 43. Each of those claims has a feature that the bottom surface has a "bottom surface having a surface tension less than a surface tension of the top surface. Since the Japanese patent is described in the translated portion as "by coating the outside of the plate with a polytetrafluoroethylene resin to obtain a mask for spraying" a fine powder of "metal ceramics or the like" it does not support an interpretation where any surface has a surface tension less than any other surface. In fact, FIG. 2 of the Japanese patent shows the

coating 2 (comprised of layers 2a and 2b) uniformly covering the top, the bottom and the side surfaces of mask A.

The cited Hefe patent relates to a wear resistant stencil with a wear resistant coating 18, 20 and 22 applied to the respective top, bottom and side wall surfaces of the stencil 10. Applicants disagree with the characterization of Hefe as "applying a protective coating to surfaces of the base stencil which are most likely to come into contact with the abrasive coating material. Applicants do not see that Hefe has any teaching of coating some, but not all of the surfaces of the stencil 10. This is evident from Hefe FIG. 3 which shows all surfaces of the stencil as coated.

The Office Action fails to set forth a *prima facie* showing of obviousness of claims 9-13, 42, 43 and 46-49. Reconsideration and allowance of those claims is requested.

3. Claims 14, 40 and 42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent No. 59-76868 in view of Hefe and Cairncross et al. (U.S. 5,447,757). Applicants respectfully traverse the rejection for the reasons stated below.

As discussed above, both the Japanese Patent and Hefe show structures where the added coating layer is on all surfaces of the mask or stencil. Neither teaches that there is any advantage to having the surface tension of one surface different from that of another surface.

The added reference to Cairncross was cited to support the Examiner's contention that it was a matter of design choice to select the nickel as the basic stencil in view of the fact that Cairncross teaches use of nickel as a stencil base material. Applicants are unable to determine what portion of the Cairncross patent is relied upon in the Office Action as teaching the use of nickel as a stencil base material. Applicants also respectfully point out that there is nothing in the Office Action that points out how the Examiner proposes to combine the structures in the Japanese Patent, Hefe and Cairncross and what evidence provides a motivation for that combination and provides evidence of an anticipation of success of making the combination.

The Office Action fails to set forth a *prima facie* showing of obviousness of claims 14, 40 and 42. Reconsideration and allowance of those claims is requested.

4. Claims 46-49 were rejected under 35 U.S.C. § 102(b) for anticipation by Pryor et al. (U.S. 4,269,874). Applicants respectfully traverse the rejection for the reasons stated below.

Pryor relates to a rotating disk 20 having several stencil openings representing characters to be formed by the stencil. The patent states⁵ that "A rotating teflon or other non-stick coated aluminum stencil disc 20 is provided having stencil characters 26 cut through the disc around its periphery as shown in FIG. 2." The disc is spun at a high speed so that ink on the surface is "spun-off"⁶ The Office Action does not state where in Pryor there is shown "a coating applied to at least one top or one bottom surface of the sheet to retard spreading of the printable adhesive onto the at least one top or one bottom surface of the sheet" as claim 46 requires.

Actually, Pryor relies upon the Teflon coating to facilitate the spreading of ink across the surface to remove it as the structure spins. In claim 46, the coating is applied "to retard" spreading of the adhesive material across the surface. Thus the coating "to retard spreading" of claim 46 is not the high surface tension Teflon coating of Pryor but is a coating having a surface lower than that of the base material. The coating material shown in Pryor acts opposite to the coating material of claim 46. Pryor does not show all elements of claims 46-49.

The Office Action fails to set forth a *prima facie* showing of anticipation of claims 46-49. Reconsideration and allowance of those claims is requested.

5. Claims 46-49 were rejected under 35 U.S.C. § 102(b) for anticipation by Pryor et al. in view of Hefele (U.S. 5,460,316). Applicants respectfully traverse the rejection for the reasons stated below.

Applicants respectfully traverse the rejection as an improper anticipation rejection since it relies upon a combination of two references. Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration⁷.

Withdrawal of the improper anticipation rejection is respectfully requested.

The Office Action fails to set forth a *prima facie* showing of anticipation of claims 46-49. Reconsideration and allowance of those claims is requested.

⁵ U.S. Patent 4,269,874 to Cairncross, Col. 3, lines 18-23.

⁶ Op cit Col 5, lines 18-20.

⁷ *In re Dillon* 919 F.2d 688, 16 USPQ2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991).

6. Claims 9-13, 41 and 43 were apparently rejected at page 13 of the Office Action under Pryor, Hefele and apparently the Japanese '868 patent although the formal rejection language does not appear.

The cited Hefele patent relates to a wear resistant stencil with a wear resistant coating 18, 20 and 22 applied to the respective top, bottom and side wall surfaces of the stencil 10. Applicant disagrees with the characterization of Hefele as "applying a protective coating to surfaces of the base stencil which are most likely to come into contact with the abrasive coating material. Applicant does not see that Hefele has any teaching of coating some, but not all of the surfaces of the stencil 10. This is evident from Hefele FIG. 3 which shows all surfaces of the stencil as coated. Claims 9 and 10 require coating of some, but not all of the surfaces. Since Hefele does not show the features for which it was cited, the Office Action fails to make out a *prima facie* showing of obviousness.

Dependent claims 11-13, 41 and 43 add additional features to those of the claims from which they depend and are patentable over the cited patents for the same reasons as those claims and more.

The Office Action fails to set forth a *prima facie* showing of obviousness of claims 9-13, 41 and 43. Reconsideration and allowance of those claims is requested.

7. Claims 14 and 50-51 were rejected under 35 U.S.C. § 102(b) for anticipation by Hefele. Applicants respectfully traverse the rejection for the reasons stated below.

As to claim 14, the Office Action states that "Hefele infers that only the top surface and side wall surfaces of the apertures of the stencil may be coated." Applicants submit that FIG. 3 of Hefele, which shows a coating of all surfaces, illustrates the teachings of Hefele which do not include that the "bottom surface may be uncoated" as the Office Action contends.

As to claims 50 and 51, the Office Action refused to give patentable weight to the functional statement that the coating is "to promote spreading of the printable adhesive material." Applicants respectfully traverse this ground of rejection and points out that functional language is specifically authorized by *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971); *In re Caldwell*, 138 USPQ 243 (CCPA 1963); MPEP § 2173.05(g).

The Office Action fails to set forth a *prima facie* showing of anticipation of claims 14 and 50-51. Reconsideration and allowance of those claims is requested.

8. Claims 45 and 52 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hefele in view of Mehregany et al (U.S. 5,579,583). Applicants respectfully traverse the rejection for the reasons stated below.

Claims 45 and 52 are dependent claims which respectively include all of the features of independent claims 14 and 50 which are believed to be allowable as discussed previously. Reconsideration and allowance of those claims is requested.

9. Claims 14, 40 and 42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pryor et al. in view of Hefele and Caincross et al. Applicants respectfully traverse the rejection for the reasons stated below.

Claim 14 calls for "A semiconductor die stencil having at least a first surface and a second surface, the first surface having a surface tension greater than a surface tension of the second surface to promote adhesive running onto a semiconductor die." Pryor provides a Teflon surface surrounding character stencils to allow ink not passing through the character stencils to be spun from the disc surface but does not show a structure where the stencil has a first surface with a surface tension greater than a second surface.

Claims 40 and 42 are dependent claims that add additional features to the independent claims from which they depend. They are patentable for the same reasons as those independent claims and more.

The Office Action fails to set forth a *prima facie* showing of obviousness of claims 14, 40 and 42. Reconsideration and allowance of those claims is requested.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6970 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

TONGBI JIANG ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 373-6970

Date

Jan 30, 2006

By

Charles E. Steffey
Charles E. Steffey
Reg. No. 25,179

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30 day of January, 2006.

Name

Nate Cannon

Signature

Nate Cannon